

ABSCQ MANUAL CODING SYSTEM

PART 4

QUERY RESOLUTION GUIDE

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1. INTRODUCTION

A query is a qualification response to which a code cannot be assigned using the procedures set out in the Training Guide. Query resolution is the process of assigning a code to a query.

In order to resolve qualification queries you must be familiar with the principles of the coding system, and with the conceptual basis and structure of ABSCQ. The conceptual basis, classification, structure and definitions for levels of attainment and fields of study are contained in the *Australian Bureau of Statistics Classification of Qualifications (ABSCQ) (1262.0)*.

The *Coding Index: Numerical Order* (Part 5 of this publication) is sorted by field of study and then level of attainment, and is useful in the query resolution process. This index is used to verify that a particular code exists and, therefore, can be assigned to a response. It is also useful in considering potential fields of study for a query, and can be used in conjunction with the classification definitions in determining the correct field of study for the response.

2. QUERY RESOLUTION STRATEGY

The first step in query resolution is to repeat the coding process. This will determine whether the query is legitimate or is the result of coder error. If a code can be assigned using normal coding procedures, the steps used to assign the code should be noted and referred back to the coder. This will help to correct any misunderstandings concerning coding procedures. If a code cannot be assigned by repeating the coding process then it is necessary to use query resolution procedures.

The procedures for resolving queries involve relaxing the rules set out in the Training Guide. This allows alternative ways to be used to find an appropriate code for the response. As it is difficult to define set rules for solving queries, which by definition are atypical responses, effective query resolution depends greatly on the experience of the person resolving the queries. As you become more familiar with the classification you will find it easier to know where a particular response belongs. The final step is to verify, by checking with the classification, that the code assigned is reasonable.

A series of examples is used to show the different approaches that can be used to find a correct code. The examples demonstrate how the classification structure and definitions, and other reference materials can be used to resolve queries.

There are basically three reasons why a response cannot be coded by following the normal coding procedures:

- i) where there is no basic word in the index that matches that given in the response;
- ii) where there is no qualifying word that matches with the information given in a response and there are no default entries; and
- iii) where the level of attainment given in the response cannot be matched with an index entry.

Sometimes, you may find that a legitimate qualification is missing from the index. This will occur with new qualifications. In these cases, contact the Classifications, Standards and Dissemination Section of the ABS (06) 252 5589 for advice on how to code the response. The coding index will be updated when necessary and users advised of the latest index amendments.

It is important to exercise care when coding a query to an 'other' or 'not elsewhere classified (nec)' category. These fields, ending in the digit '9', are allocated to known fields of study which may belong to a particular broad or narrow field of study, but which are not common enough to form a distinct narrow or detailed field of study. These categories should not be used to code a qualification if it is not clear where else it belongs. In these cases the qualification should be coded to a 'not further defined' category in either the broad or narrow field of study with which it can be definitely identified.

3. QUERY RESOLUTION PROCEDURES

As mentioned above, the first step in resolving queries is to repeat the coding procedures. If the response cannot be coded, use query resolution procedures.

3.1 No Match on Field of Study

Some queries will be the result of unusually described responses. In this section, we look at how the exact and close match rules can be relaxed to code those queries arising because there is no match on field of study.

3.1.1 No Match on Basic Word

When the basic word of a response cannot be matched, the *exact match on basic word* rule can be relaxed. Sometimes the basic word of a response can be modified to find another basic word of similar meaning. In other cases you may have to replace the given basic word with a synonym.

Example:

Name of Qualification:	BSc
Field of Study:	Neuropsychology

The basic word *neuropsychology* is not in the index but *psychology* is:

3411 Psychology/ Bachelor

Before assigning the code 3411 to this query, check that this code seems reasonable. *Neuropsychology* is defined as “the study of the **psychological** effects of organic brain disease” (*Oxford Companion to Medicine*, Vol II (N-Z), Oxford University Press 1986). Detailed Field 411 Psychology, is defined as “the study of causes and modification of behaviour...”, and it seems reasonable for this response to be coded to this field, and the code 3411 assigned.

Example:

Name of Qualification:	PhD
Field of Study:	Electrophysiology

This is similar to the previous example. The single basic word *electrophysiology* cannot be found in the index. Look up *physiology* in the coding index:

1511 Physiology/ Doctorate

Again, before assigning the code, check that this code seems reasonable. *Electrophysiology* is “the science of electrical phenomena associated with living organisms” (*Chambers Dictionary of Science and Technology*, W & R Chambers Ltd 1974). Detailed Field 511 Biological Science, is defined as “the study of the **structure, function**, reproduction, growth, evolution and behaviour of living organisms”. The code 1511 seems appropriate for this response.

Example:

Name of Qualification:	Logging
Field of Study:	Logging Timber

The basic word *logging* is not in the index. Look for words with a similar meaning to the basic word. Possible synonyms for logging are *woodsmantry*, *felling*, *forestry* and *lumbering*. *Woodsmantry* is in Detailed Field 697 Wood Machining and Turning, neither *felling* nor *lumbering* are in the index, and *forestry* is in Detailed Field 892 Forestry. The next step is to check the definitions for detailed fields 697 and 892 to see which, if either, is an appropriate place to code this response.

In the classification Detailed Field 697 Wood Machining and Turning, is described as “the study of shaping wood using various machines...”. Detailed Field 892 Forestry, is defined as “the study of establishing, cultivating, harvesting and managing forests”. Logging is more related to harvesting timber than to woodturning, therefore Detailed Field 892 is the correct field of study. There is no level of attainment given so a zero ‘0’ is assigned for the level and the code 0892 is assigned to this response.

If the information in the response is very general it may be difficult to find an appropriate synonym.

Example:

Name of Qualification:	B App Sc
Field of Study:	Imaging

In the index there are only entries for *medical imaging*, and none of these are at the *bachelor* level of attainment. However, in this case, it is a good place to begin looking for an appropriate code. It is likely that this qualification is about radiography or x-ray techniques and may be related to *medical imaging*. Check the definitions of the relevant field of study, i.e. Detailed Field 234 Radiography. The definition states that this is “the study of technologies which use...for producing diagnostic images and administering radiation therapy”. Next, check the numeric index under the field of study 234 to see if there are other similar qualifications at the bachelor level of attainment.

3234	Radiation, Medical/ <u>Bachelor</u>
3234	Radiography/ except above/ <u>Bachelor</u>
3234	Radiotherapy/ <u>Bachelor</u>

There are three entries with a level of attainment code ‘3’, indicating that qualifications in this field of study do exist at the bachelor level. The code 3234 can be assigned to this query.

N.B. Do not assign a 4-digit code if it is not in the index, i.e. do not create new 4-digit codes. The only exceptions to this rule is assigning level codes ‘0’ and ‘8’, and adding trailing zeroes for field of study.

Example:

Name of Qualification:	Electrical Harness Traineeship
Field of Study:	maths, communication, electronics, graphics
Institution:	School of Mines, Ballarat

In this example the information given for the field of study question refers more to specific subjects studied rather than a main field of study for the qualification. The name of the qualification information appears more specific but cannot be found in the index. However, there is some information that can be used.

Electrical and electronic qualifications are found in Broad Field 6 Engineering. In this case there are three narrow fields that should be looked at: Narrow Field 63 Electrical and Electronic Engineering, Narrow Field 65 Metallurgical and Mining Engineering, and Narrow Field 69 Other Engineering. The response indicates that the qualification was gained from a mining school so Narrow Field 65 should be checked. Narrow Field 69 should also be checked as it contains a range of qualifications that do not belong in other fields.

After checking the definitions for the three narrow fields it appears that this qualification should be classified to Electrical and Electronic Engineering. Narrow Field 65 is concerned with the extraction of minerals and does not mention *electrical* at all. Narrow Field 69 also does not contain any fields of study that look appropriate for this response. Using a process of elimination we have concluded that this qualification belongs in Narrow Field 63 Electrical and Electronic Engineering.

Examine this narrow field further to see if the qualification fits into any specific detailed field. However, the information in the response is too general. We do not know if the qualification involves *fitting*, *installing* or *servicing* etc, so a detailed field cannot be selected. However, a narrow field code can be assigned and a trailing zero added. The field of study code then, is 630. Check the level by using the numeric index and look up the field 630. There are other *traineeship certificates* for this field of study so the level of attainment code ‘7’ can be assigned to this query. Therefore, the 4-digit code assigned is 7630.

3.1.2 No Match on Qualifying Word

In some cases the basic word can be matched but qualifying words cannot (either exactly or closely) and there is no *except above* index entry. In those cases where an index entry requires an exact match, relax the exact match rule and try using synonyms or words with the same meaning, as in 3.1.1 *No Match on Basic Word*.

Example:

Name of Qualification:	BSc
Field of Study:	Metallographic Engineering

In this example the basic word *engineering* can be matched. However, all the index entries, apart from the *NAI (about type of engineering)*, require exact matches on qualifying words and there is no *except above* entry. However, the following index entry may be a close match:

3651 Engineering, Metallurgical/ Bachelor

Check the meaning of *metallographic* (by using a dictionary or other reference material) and assign the code 3651 to the response.

Example:

Name of Qualification:	Polysomnographic technologist
Field of Study:	Sleep and sleep disorders

Some responses may contain words that are unfamiliar, such as the word *polysomnographic* in this example. If the word is not in any available dictionary, try using the other information given in the response to find a code. The possible alternatives are to use *sleep technologist* and *sleep disorders* as fields of study. However, in this case, no match can be found for either field of study.

The respondent has given the word *technologist*, so it is reasonable to assume that *polysomnographic* is some sort of technology or equipment used by a technologist. The information in the field of study indicates that the person has studied *sleep disorders*, so we might assume that the equipment is used in some medical capacity. The index can be checked again using the basic word *technology*, for entries that may be related to the response.

L592	Technology, Laboratory/ <u>Level</u>
L592	Technology, Medical/ except above/ <u>Level</u>

These entries may be related to the response and both are in Detailed Field 592 Laboratory Technology. The definition states that "Laboratory Technology is the study of laboratory techniques and equipment used in biological, chemical, medical and other laboratories". The field of study 592 may be an appropriate place to code this response. To verify this, look up 592 in the numeric index to check for similar qualifications.

L592	Measurement, Clinical/ <u>Level</u>
L592	Science, Medical Laboratory/ <u>Level</u>
L592	Technician, Laboratory/ <u>Level</u>
L592	Technician, Medical/ <u>Level</u>

These entries confirm that Detailed Field 592 Laboratory Technology, is the appropriate field for the response. No level information has been given so a zero '0' is assigned for the level. The code for this response is 0592.

It is important to exercise care when making assumptions about a qualification. Only use the information given to understand what a qualification is about. If a response is vague or ambiguous do not make assumptions unless there is other information, such as institution, that can be used to find out more about the qualification from external sources. Use dictionaries where possible to check the meaning of unfamiliar words and check the classification definitions carefully.

Example:

Name of Qualification: Graduate Diploma in Industrial Management
 Field of Study: -----
 Institution: Swinburne Institute of Technology

In this example the basic word can be matched but the qualifying word cannot, and the *NAI* (*about type of management*) cannot be selected because there is additional information, i.e. *industrial*. The information given is too broad and vague to deduce anything about the field of study. The term *industrial management* may be related to industrial relations, to the management of an industrial plant, or to the technical side of industry. In this example, the institution information given can be followed up, either by contacting the institution and enquiring about the course, or by checking the handbook for that institution (most libraries keep copies of these). The *Swinburne Institute of Technology Handbook* (1988) lists a *Graduate Diploma in Industrial Management* offered by the Faculty of Engineering. The description of the course states that it is aimed at "...engineering graduates who wish to pursue a management career in industry". From this information it is clear that the qualification belongs in Broad Field 1 Business and Administration, and Narrow Field 11 Management. By checking the detailed field definitions, it appears that this qualification is best coded to Detailed Field 111 Business Management. The level given is *graduate diploma* which has a code of '2', so the correct code for this qualification is 2111. Check the numeric index to confirm that such a code exists, and then assign the code 2111 to this response.

Example:

Name of Qualification: Certificate in Vocational Studies
 Field of Study: Health Assistant

The first step in resolving this query is to assign a field of study code if possible. The field of study is clearly defined, but is not codable through usual procedures. It is concerned with health and belongs in Broad Field 2 Health. However there is no further information in the response to enable coding to a narrow or detailed field of study. Therefore, it can only be coded to the broad field of study '200'.

The second step is to assign a level of attainment code if possible. *Certificate in vocational studies* is the title of a qualification and is codable using normal procedures. To code this level look up the basic word *studies* and the qualifying word *vocational* in the coding index.

7888 Studies, Vocational/ NAI (about field of study)/ Certificate

We can use the level code '7' and combine it with the field of study code '200'. Check that this code exists by looking in the numeric index before assigning the code 7200 to this response.

Example:

Name of Qualification: Graduate Diploma of Urban Policy and Research
 Field of Study: Urban Policy

The field of study *urban policy* is not in the index and the other entries under the basic word *policy* do not appear related. Look for similar index entries using *research* as a basic word. For example:

2499 Research, Urban/ Graduate Diploma

The field of study *urban research* is included in the Detailed Field 499 Other Society and Culture, nec. Because there is no specific definition for this detailed field the numeric index should be checked for similar qualifications coded to the detailed field of study 499.

2499 Design, Urban/ Graduate Diploma
 2499 Planning, Urban/ Graduate Diploma
 2499 Research, Urban/ Graduate Diploma
 2499 Studies, Urban/ Graduate Diploma

These entries indicate that the field of study 499 is correct and can be assigned for the level of attainment *graduate diploma*. Therefore, the code 2499 is assigned to this response.

Example:

Name of Qualification:	Bachelor of Applied Science
Field of Study:	Environmental Assessment and Land Use Policy

In this example the basic words *assessment* and *policy* are not particularly useful, so other information in the response should be used. *Environment* and *use* are possible basic words. For example:

7512 Use, Land/ Certificate

This entry is in Detailed Field 512 Environmental Science, which seems an appropriate field of study for this qualification. The next step is to look at the definition, which states that “Environmental Science is the study of the relationships between living organisms and the natural, rural, industrial and urban environments...”. It seems reasonable that an *environmental assessment* qualification belongs in this field of study. This can be checked by looking in the numeric index under 512 and the level *bachelor*. There are many entries that are similar to the given qualification so we can be reasonably sure that the field of study 512 is correct. The code 3512 should be assigned to the response.

3.1.3 Uncodable Field of Study

Sometimes a response will contain information that is too vague or ambiguous to code. If there is no other information in the response which could be used as a field of study, then the field of study code ‘888’ (uncodable) is assigned. The response should also be checked for level of attainment information which could be coded.

Example:

Name of Qualification:	Graduate Diploma
Field of Study:	Environment

The field of study in this response is vague and can mean different things such as *environmental science* (in Broad Field 5 Natural and Physical Sciences), or *built environment* (in Broad Field 7 Architecture and Building). Because of this ambiguity and the fact that there is no other field of study information to use, the field of study is uncodable and is assigned the code ‘888’. However, the level of attainment can be coded and the code 2888 assigned to this response.

Example:

Name of Qualification:	Advanced Certificate
Field of Study:	Field Construction and Maintenance

Here the level of attainment can be coded, however, the information in the field of study, *field construction and maintenance* is not very informative. This description could be related to agriculture, engineering or building. Therefore, the field of study is considered uncodable and assigned the code ‘888’. The 4-digit code for this response is 5888.

3.1.4 Field of Study Not Stated

Sometimes a response may state a level of attainment but no field of study. In most cases such responses can be coded using normal coding procedures (see *Part 2, Section 5.2 Missing Field of Study*). However, sometimes these responses may be raised as queries.

If a level is stated but no field of study is given, code the level if possible and assign zeroes ‘000’ for the field of study. The following section explains how to deal with unusually described or unfamiliar levels of attainment.

3.2 No Match on Level of Attainment

Some responses have levels of attainment that are unfamiliar or ambiguous. Others will be known, but are not in the index for a particular index entry. These will be raised as queries by the coder. The level of attainment definitions should be used when considering the level code for a qualification. In addition, the level of a qualification may also be determined by referring to the entry requirements and length of courses found in institution handbooks.

3.2.1 Equivalent ABSCQ Levels of Attainment

Some ABSCQ level categories contain more than one qualification. For example, all associate diplomas, advanced certificates and certificates of technology are included in Level 5 Associate Diploma. This means that in terms of ABSCQ they have the same level of attainment.

In some cases, where an exact match cannot be made on one level of attainment, an equivalent level may sometimes be found. For example, if a match cannot be made on *advanced certificate* for a particular field of study, look within that field of study for other qualifications with the same ABSCQ level of attainment. Use the coding index and the level definitions to identify other qualifications with the same ABSCQ level of attainment.

It is important to remember that a 4-digit code can **only** be assigned to a response if it exists in the index.

Example:

Name of Qualification:	Associate Diploma
Field of Study:	Numerical Control

The field of study is codable under the basic word *control*, and there are three entries for the qualifying word *numerical*.

7631	Control, Numerical/ <u>Certificate</u>
5631	Control, Numerical/ <u>Certificate of Technology</u>
0641	Control, Numerical/ NAI (about level)

There is no match for *associate diploma* but the *certificate of technology* has an equivalent level of attainment code, i.e. '5' (this can be checked by looking up *associate diploma* in the coding index or the level definitions), therefore, the code 5631 can be assigned to this response.

Example:

Name of Qualification:	Technician Certificate
Field of Study:	Polymer Science

In this example the field of study can be matched under the basic word *science* and the qualifying word *polymer*. There are only two index entries.

2522	Science, Polymer/ <u>Graduate Diploma</u>
0522	Science, Polymer/ NAI (about level)

The correct field of study for this response is Detailed Field 522 Chemistry. However, the level of attainment given cannot be matched with either of the index entries. Check the coding index to find which level of attainment code is assigned to *technician certificates*.

5000	Certificate, Technician
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The level code for this response is '5', and therefore the 4-digit code should be 5522. The next step is to verify that this code is in the index. Check the field of study 522 in the numeric index for entries with level of attainment '5'. In this case there are three entries.

5522	Chemistry/ <u>Associate Diploma</u>
5522	Chemistry/ <u>Associateship</u>
5522	Technology, Chemical/ <u>Associate Diploma</u>

The code 5522 can be assigned to this response.

If the particular level of attainment in a response or its equivalent is not in the index for a particular field of study then assign the level code '8' (uncodable) to the response.

There are cases where a code does not exist, i.e. a 4-digit code is not in the index. This is because research at the time the index was prepared, showed that there were no qualifications at that particular level of attainment for that particular field of study. In these cases, a level of attainment code cannot be assigned and the code '8' (uncodable) is used.

Example:

Name of Qualification:	Master of Applied Science
Field of Study:	Fire Technology

In this example the field of study *fire technology* is codable under the basic word *technology*, but there is no index entry for the level *master*. In the numeric index under the field 992 there is no equivalent level code (in this case a level of attainment of '1' is required). This means that the code 1992 does not exist, and so cannot be assigned to this response. The uncodable level '8' has to be assigned and the resulting code is 8992.

Example:

Name of Qualification:	Graduate Diploma in Aero-systems engineering
Field of Study:	Aero-systems engineering

A match can be made on the basic word *engineering*. *Aero-systems* is not in the index but both *aeronautical* and *aerospace engineering* are (Detailed Field 692 Aeronautical Engineering Science). By relaxing the *exact match on qualifying words following a comma (,)* rule, a close match can be made, and the field of study code 692 assigned to this response. However, there is no match for *graduate diploma*. The numeric index can be used to check for a level of attainment of '2' (the level of attainment code assigned to *graduate diploma*) within the field of study 692. This level of attainment is not available, therefore the uncodable level '8' is used, and the code 8692 assigned to the response.

3.2.2 Ambiguous Levels of Attainment

Sometimes a level of attainment may be ambiguous because it combines the wording of two different levels, and so is difficult to code correctly. For example, a response such as *associate graduate diploma* is difficult to code, as *associate diploma* and *graduate diploma* are both in the index but have different level of attainment codes. It would be incorrect to assume that the qualification was either one or the other of these so neither code can be used. Such a response should be assigned '8' for the level of attainment.

3.3 Overseas Qualifications

In general the most common qualifications from overseas, such as Bachelor of Arts, Bachelor of Science etc, can be coded to the Australian equivalents.

Example:

Name of Qualification:	Bachelor of Science
Field of Study:	Ocean Engineering
Institution:	Tian Gian University

This would be raised as a query because there is no match for the qualifying word *ocean*. It is incorrect to code to Detailed Field 694 Marine Engineering Science, even though *ocean* is sometimes equated with *marine*. It is not clear what is meant by the word *ocean* or what is involved in *ocean engineering* so code to the broad field only, i.e. '600'. The level of attainment is *bachelor*, i.e. '3'. The code 3600 is assigned to this response.

Example:

Name of Qualification:	Associate of College of Preceptors, London School of College Teaching
Field of Study:	Teaching
Institution:	Avery Hill Training College, London

The basic word *teaching* is in the index, however none of the entries under *teaching* match the response. There are *except above* entries but no match can be made with the levels in the *except above* entries. There is no information on what kind of *teaching* was studied, therefore, code to the broad field only, i.e. '300'. The level is uncodable so the code 8320 is assigned to this response.

Example:

Name of Qualification:	Stimyologist B.A.
Field of Study:	B.A. in Stimyology
Institution:	Tibet Stimyology

In a query such as this, where the meaning of Stimyology cannot be determined, the code '888' is assigned for field of study. In Australia, the letters *B.A.* refer to the level *Bachelor of Arts*, however, in this case it is not known what these letters refer to. Therefore, the code '8' should be used for level, and a code of 8888 assigned to this response.

Example:

Name of Qualification:	Diplomate of American College of Theriologists
Field of Study:	Veterinary Reproduction
Institution:	University of Florida

The information in this response is ambiguous. The field of study *veterinary reproduction* could be coded to Detailed Fields 813 Animal Husbandry or 251 Veterinary Science. The word *theriology* refers to the study of mammals and could be coded to Detailed Field 511 Biological Science. Therefore, as it is not clear what is the more appropriate detailed field of study for this response, the code '888' should be assigned. The code '8' should be used for level of attainment as the word diplomate cannot be equated with an equivalent Australian qualification. The code 8888 is assigned to this response.

4. SUMMARY

There are few set rules in the query resolution process as, by their nature, queries are outside the standard coding procedures. However, query resolution can be carried out in a relatively systematic manner. The definitions for levels of attainment and fields of study are an essential reference tool in query resolution, and should be used in conjunction with the coding index to verify codes. Other helpful materials are dictionaries and educational institution handbooks.

Query Resolution Procedures

- Relax the exact match rule on basic and qualifying words and attempt to make a close match.
- Use synonyms for the basic and qualifying words.
- Look for as many alternatives for field of study as possible, and then eliminate the least appropriate options, until one or more appropriate field of study is found.
- Use the classification definitions and numerical index to confirm that the field of study is appropriate and reasonable for the response.
- Use the numerical index to verify that a 4-digit code exists, **before** assigning it to a response.
- If a level code does not exist for a particular field of study, assign the code '8' (uncodable) for level.
- If a field of study cannot be coded then assign the code '888' (uncodable) for the field of study.
- If both level of attainment and field of study are uncodable assign 8888 to the response.
- If no level has been stated then assign a zero '0' for level.
- If a level has been stated but there is no field of study in the response, code the level and assign '000' for field of study.

Points to Remember

- **Do not** assign codes that are not listed in the index (except for 'uncodable', 'not stated' or 'not further defined' codes).
- If in doubt about whether a narrow or detailed field of study code is appropriate, code to the broad or narrow field only rather than to an 'nec' category.
- Only use information about a qualification supplied in the response. Do not code on the basis of other information such as occupation.

If you require any further information or assistance in coding qualifications contact the Classifications, Standards and Dissemination Section of the ABS on (06) 252 5589.

